

CLAIMS

1. A scrubber comprising:
 - a) a bottom carriage including at least one transverse rotary brush;
 - b) a vertical support extending above the bottom carriage;
 - c) a top carriage including at least one transverse rotary brush;
 - d) a hinge connecting the top carriages to the vertical support, the hinge allowing movement of the top carriage relative to the vertical support between an open and a closed position about a hinge axis to respectively open and close the scrubber;
 - e) a drive system having cooperating components arranged in the bottom carriage, the vertical support and the top carriage for rotating the brushes in the top and bottom carriages; and
 - f) one of the components of the drive system being a rotary component having its rotational axis corresponding to the hinge axis.
2. A scrubber as in Claim 1 wherein the top carriage comprises:
 - a) a top, front and rear walls, opposite side walls and an open bottom;
 - b) an interior wall spaced from each of the side walls; and
 - c) a plurality of brushes journaled at their ends to each of the interior walls.
3. A scrubber as in Claim 2 wherein the top carriage includes a piping system attached to the underside of the top for introducing fluids into the scrubber.
4. A scrubber as in Claim 2 wherein the components of the drive system arranged in the top carriage include a plurality of driven sprockets disposed in a space defined between one of the interior walls and an adjacent side wall and the top carriage includes a plurality of brushes, each brush having an end driven by one of the driven sprockets.
5. A scrubber as in Claim 4 including a cap extending between the interior wall and the adjacent side wall providing a cover for the space therebetween.

6. A scrubber as in Claim 1 wherein the rotary component transfers a drive force from the component of the drive system arranged in the vertical support to the component of the drive system located in the top carriage.

7. A scrubber as in Claim 1 wherein the bottom carriage comprises:
a) a bottom, front and rear walls, opposite side walls and an open top;
b) an interior wall spaced from each of the side walls; and
c) a plurality of brushes journaled at their ends to each of the interior walls.

8. A scrubber as in Claim 7 wherein the components of the drive system arranged in the bottom carriage include a plurality of driven sprockets disposed in a space defined between one of the bottom carriage interior walls and an adjacent side wall and the bottom carriage includes a plurality of brushes, each brush having an end driven by one of the driven sprockets.

9. A scrubber as in Claim 8 including a cap extending between the bottom carriage interior wall and the adjacent side wall providing a cover for the space therebetween.

10. A scrubber as in Claim 7 wherein the bottom carriage includes a sump having a false bottom sloped downward from front to back and the rear wall includes a discharge outlet for removing fluids and debris from the scrubber.

11. A scrubber as in claim 10 wherein the bottom carriage includes a transverse dividing wall spaced from and extending generally parallel to the rear wall, the space between the transverse dividing wall and rear wall being in turn divided into a liquid tight motor compartment and a drainage chamber that communicates with both the sump and discharge outlet.

12. A scrubber as in Claim 11 including a fan in the drainage chamber driven by a motor in the motor chamber, the fan acting to create a slight negative pressure in the scrubber and to facilitate the discharge of fluids and debris from the scrubber.

13. A scrubber as in Claim 1 wherein the drive system comprises:

a) a motor in the bottom carriage;

b) driven sprockets carried by each of the bottom and top carriages and connectable to each of the brushes in the bottom and top carriages respectively;

c) the drive system components in the top and bottom carriages operatively connecting the motor with each of the driven sprockets;

d) the drive system component arranged in the vertical support driving the rotary component; and

e) the drive system component arranged in the top carriage for rotating the brushes in the top carriage being driven off of the rotary component.

14. A scrubber as in Claim 13 wherein the drive system component arranged in the vertical support is a timing belt.

15. A scrubber as in Claim 13 wherein the drive system components in each of the top and bottom carriages includes at least one timing belt extending to each of the driven sprockets.

16. A scrubber as in Claim 1 wherein the vertical support has an inclined surface and the top carriage has a complimentary inclined surface that rest one against the other such that the inclined surface of the vertical support supports at least part of the weight of the top carriage when the top carriage is in a closed position.

17. A scrubber as in Claim 1 including cooperating flaps depending from the front wall of the top carriage and upstanding from the front wall of the bottom carriage to suppress the discharge of fluids from within the scrubber.

18. A scrubber as in Claim 17 wherein the cooperating flaps are arranged to drape and seal about a handle extending from an object that is disposed for cleaning between the top and bottom carriages.

19. A scrubber as in Claim 1 including a removable wire mesh basket for holding an object to be cleaned, the basket being located in the bottom carriage and between the brushes of the top and bottom carriages.

20. A scrubber comprising:

a) a top carriage including at least one rotatable brush and a cleaning fluid inlet;

b) a bottom carriage including at least one rotatable brush and a spent cleaning fluid out let;

c) vertical support extending above the bottom carriage;

d) a hinge connecting the top carriages to the vertical support, the hinge allowing movement of the top carriage relative to the vertical support between an open and a closed position about a hinge axis to respectively open and close the scrubber;

e) a drive system for rotating the brushes, the drive system having cooperating drive components arranged in the bottom carriage, the vertical support and the top carriage, one of the components of the drive system being a rotary component having its rotational axis corresponding to hinge axis; and

f) cooperating flaps at the front of the top and bottom carriages to suppress the discharge of fluids from between the top and bottom carriages, the flaps arranged to deform about a portion of an object extending through the flaps and into a space between the brushes of the top and bottom carriages so as to provide a seal about the portion extending through the flaps.

21. A scrubber as in Claim 20 wherein each of the top and bottom carriages have opposite exterior side walls topped by a cap and the caps on the respective top and bottom carriage side walls pressing one against another to provide a seal to prevent the escape of fluids from along the opposite sides of the top and bottom carriages.

22. A scrubber as in Claim 21 wherein:

a) each of the top and bottom carriages has an interior side wall adjacent one of the exterior side walls, the exterior and interior side walls of the respective top and bottom carriages defining a space therebetween for housing components of the drive system;

b) the brushes in the top and bottom carriages are journaled to the interior side walls are journaled to the interior side walls and are releasably connected to the components of the drive system disposed in the spaces; and

c) the caps closing off the spaces.